

1 This listing of claims will replace all prior versions, and listings, of claims in the
2 application:

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4 **Listing of Claims:**

5 1. (currently amended) A method comprising:
6 selectively aligning at least two image based rendering (IBR) image data
7 along a specific direction; and

8 selectively rebinning the aligned IBR image data to form a multi-
9 perspective panorama by determining at least one displacement vector associated
10 with the at least two IBR image data and subdividing at least one of the IBR image
11 data based on the displacement vector and combining specific portions selected
12 from each IBR image data to form at least a portion of the multi-perspective
13 panorama.

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15 2. (original) The method as recited in Claim 1, wherein the IBR
16 image data includes concentric mosaic (COM) image data.

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18 3. (original) The method as recited in Claim 2, wherein the specific
19 direction is substantially a horizontal direction with respect to a captured scene.

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21 4. (original) The method as recited in Claim 1, wherein selectively
22 aligning the at least two image based rendering (IBR) image data further includes
23 pair-wise aligning of concentric mosaic (COM) image data.

1 5. (currently amended) The method as recited in Claim 1,
2 wherein selectively rebinning the aligned IBR image data to form the multi-
3 perspective panorama further includes:

4 subdividing each of the IBR image data into a plurality of portions; and
5 ~~combining a specific portion selected from each IBR image data to form a~~
6 ~~portion of the multi-perspective panorama.~~

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8 6. (currently amended) The method as recited in Claim 5, wherein
9 subdividing each of the IBR image data into the plurality of portions further
10 includes ~~determining at least one displacement vector associated with the at least~~
11 ~~two IBR image data and subdividing at least one of the IBR image data based on~~
12 ~~the~~ a magnitude of the displacement vector.

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14 7. (original) The method as recited in Claim 6, wherein the
15 displacement vector is a motion vector.

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17 8. (original) The method as recited in Claim 6, wherein determining
18 at least one displacement vector further includes setting the displacement vector
19 for each of the at least two IBR image data to be of equal magnitude so as to
20 support a simple rebinning process.

1 9. (original) The method as recited in Claim 6, wherein determining
2 at least one displacement vector further includes setting the displacement vector
3 for each of the at least two IBR image data to be of different magnitude while
4 supporting a smart rebinning process.

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6 10. (original) The method as recited in Claim 1, further comprising:
7 generating a set of multi-perspective panoramas to provide a dense
8 representation of an IBR captured environment.

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a' 10 11. (original) The method as recited in Claim 10, further comprising:
11 encoding at least a portion of the multi-perspective panoramas using a 3D
12 wavelet transform.

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14 12. (currently amended) A computer-readable medium having
15 instructions for performing the steps of:

16 selectively aligning at least two image based rendering (IBR) image data
17 along a specific direction; and

18 selectively rebinning the aligned IBR image data to form a multi-
19 perspective panorama by determining at least one displacement vector associated
20 with the at least two IBR image data and subdividing at least one of the IBR image
21 data based on the displacement vector and combining specific portions selected
22 from each IBR image data to form at least a portion of the multi-perspective
23 panorama.

1 13. (original) The computer-readable medium as recited in Claim 12,
2 wherein the IBR image data includes concentric mosaic (COM) image data.

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4 14. (original) The computer-readable medium as recited in Claim 13,
5 wherein the specific direction is substantially a horizontal direction with respect to
6 a captured scene.

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8 15. (original) The computer-readable medium as recited in Claim 12,
9 wherein selectively aligning the at least two image based rendering (IBR) image
10 data further includes pair-wise aligning of concentric mosaic (COM) image data.

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12 16. (currently amended) The computer-readable medium as
13 recited in Claim 12, wherein selectively rebinning the aligned IBR image data to
14 form the multi-perspective panorama further includes:

15 subdividing each of the IBR image data into a plurality of portions; and
16 ~~combining a specific portion selected from each IBR image data to form a~~
17 ~~portion of the multi-perspective panorama.~~

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19 17. (currently amended) The computer-readable medium as
20 recited in Claim 16, wherein subdividing each of the IBR image data into the
21 plurality of portions further includes ~~determining at least one displacement vector~~
22 ~~associated with the at least two IBR image data and subdividing at least one of the~~
23 IBR image data based on ~~the~~ a magnitude of the displacement vector.

1 18. (original) The computer-readable medium as recited in Claim 17,
2 wherein the displacement vector is a motion vector.

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4 19. (original) The computer-readable medium as recited in Claim 17,
5 wherein determining at least one displacement vector further includes setting the
6 displacement vector for each of the at least two IBR image data to be of equal
7 magnitude so as to support a simple rebinning process.

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9 20. (original) The computer-readable medium as recited in Claim 17,
10 wherein determining at least one displacement vector further includes setting the
11 displacement vector for each of the at least two IBR image data to be of different
12 magnitude while supporting a smart rebinning process.

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14 21. (original) The computer-readable medium as recited in Claim 12,
15 further comprising instructions for:

16 generating a set of multi-perspective panoramas to provide a dense
17 representation of an IBR captured environment.

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19 22. (original) The computer-readable medium as recited in Claim 21,
20 further comprising instructions for:

21 encoding at least a portion of the multi-perspective panoramas using a 3D
22 wavelet transform.

1 23. (currently amended) An apparatus comprising:
2 at least one processing unit logic configured to selectively align at least two
3 image based rendering (IBR) image data along a specific direction, and selectively
4 rebin the aligned IBR image data to form a multi-perspective panorama by
5 determining at least one displacement vector associated with the at least two IBR
6 image data and subdividing at least one of the IBR image data based on the
7 displacement vector and combining specific portions selected from each IBR
8 image data to form at least a portion of the multi-perspective panorama.

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10 24. (original) The apparatus as recited in Claim 23, wherein the IBR
11 image data includes concentric mosaic (COM) image data.

13 25. (original) The apparatus as recited in Claim 24, wherein the
14 specific direction is substantially a horizontal direction with respect to a captured
15 scene.

17 26. (currently amended) The apparatus as recited in Claim 23, wherein
18 the processing unit logic is further configured to pair-wise align of concentric
19 mosaic (COM) image data.

21 27. (currently amended) The apparatus as recited in Claim 23, wherein
22 the processing unit logic is further configured to subdivide each of the IBR image
23 data into a plurality of portions, ~~and combine a specific portion selected from each~~
24 ~~IBR image data to form a portion of the multi-perspective panorama.~~

1 28. (currently amended) The apparatus as recited in Claim 27, wherein
2 the processing unit logic is further configured to ~~determine at least one~~
3 ~~displacement vector associated with the at least two IBR image data and~~ subdivide
4 ~~at least one of the IBR image data based on the~~ a magnitude of the displacement
5 vector.

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7 29. (original) The apparatus as recited in Claim 28, wherein the
8 displacement vector is a motion vector.

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10 30. (currently amended) The apparatus as recited in Claim 28, wherein
11 the processing unit logic is further configured to set the displacement vector for
12 each of the at least two IBR image data to be of equal magnitude so as to support a
13 simple rebinning process.

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15 31. (currently amended) The apparatus as recited in Claim 28, wherein
16 the processing unit logic is further configured to set the displacement vector for
17 each of the at least two IBR image data to be of different magnitude while
18 supporting a smart rebinning process.

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20 32. (currently amended) The apparatus as recited in Claim 23, wherein
21 the processing unit logic is further configured to generate a set of multi-
22 perspective panoramas to provide a dense representation of an IBR captured
23 environment.

1 33. (currently amended) The apparatus as recited in Claim 32, wherein
2 the processing unit ~~legie~~ is further configured to encode at least a portion of the
3 multi-perspective panoramas using a 3D wavelet transform.
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5 34-36. (canceled)
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